

a. internet packet sending and reception means, adapted to either send internet packets or receive said internet packets, characterised in that said destination host further comprises the following means;

b. assignment detection means, adapted to detect if said destination host has been configured for internet connectivity and a global internet address has been assigned; and

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c. adjacent router notification means, coupled with an input to an output of said assignment detection means and adapted to send a Resource Reservation Protocol message containing said global internet address to an adjacent router of said destination host along a shortest path in direction of said edge router in order to update a routing-table of said adjacent router, wherein said Resource Reservation Protocol message is sent at assignment of said global internet address.

11. (Twice amended) A router for use in a private internet network, internet packets being forwarded from a destination host of said private internet network towards a host connected to an internet network or vice versa, said private internet network comprising at least one said router and at least one said destination host, each coupled to one of at least one said router, said private internet network being coupled to said internet network through at least one edge router, said router comprising:

a. message reception means adapted to receive a Resource Reservation Protocol message, characterised in that said router further comprises the following means:

b. message interpretation means, coupled with an input to an output of said message reception means and adapted to interpret said Resource Reservation Protocol message containing a global internet address of said destination host;

c. routing-table updating means, coupled with an input to an output of said message interpretation means and adapted to update a routing-table with said global internet address of said destination host; and

d. message forwarding means, coupled with an input to an output of said routing-table updating means and adapted to forward said Resource Reservation Protocol message containing said global internet address of said destination host towards an adjacent router or edge router on a shortest path between said destination host and said edge router, wherein said Resource Reservation Protocol message is sent at assignment of said global internet address.

12. (Twice amended) An edge router for use in a private internet network, internet packets being forwarded from a destination host of said private internet network towards a host connected to an internet network or vice versa, said private internet network comprising at least one said router and at least one said destination host, each coupled to one of said at least one said router, said private internet network being coupled to said internet network through at least one said edge router, said edge router comprising:

a. message reception means adapted to receive a Resource Reservation Protocol message, characterised in that said edge router further comprises the following means:

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b. message interpretation means, coupled with an input to an output of said message reception means and adapted to interpret said Resource Reservation Protocol message containing a global internet address of said destination host; and

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c. routing-table updating means, coupled with an input to an output of said message interpretation means and adapted to update a routing-table with said global internet address of said destination host, wherein said Resource Reservation Protocol message is sent at assignment of said global internet address.

13. (Twice amended) A destination host for use in a private internet network, internet packets being forwarded from said destination host towards a host connected to an internet network or vice versa, said private internet network comprising at least one router and at least one said destination host, each coupled to one of said at least one router and where said destination host is assigned a global internet address, said private internet network being coupled to said internet network through at least one edge router, said destination host comprising:

a. internet packet sending and reception means, adapted to either send internet packets or receive said internet packets characterised in that said destination host further comprises the following means:

b. assignment detection means, adapted to detect if said destination host gets internet connectivity and a global internet address is assigned; and

c. multicast subscription means, coupled with an input to an output of said assignment detection means and adapted to notify an adjacent router of said private internet network on a shortest path towards said edge router about the presence of a subscribing destination host using

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a multicast protocol and said global internet address, wherein said at least one edge router sets up a multicast group and said destination host generates a multicast join message, such that said multicast group is joined when said multicast join message is received by said at least one edge router.

14. (Twice amended) A router for use in a private internet network, internet packets being forwarded from a destination host of said private internet network towards a host connected to an internet network or vice versa, said private internet network comprising at least one said router and at least one said destination host, each coupled to one of said at least one router and wherein said destination host is assigned a global internet address, said private internet network being coupled to said internet network through at least one edge router, characterised in that said router comprises:

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a. message reception means, adapted to receive a multicast message containing said global internet address;

b. multicast group updating means, coupled with an input to an output of said message reception means and adapted to interpret said multicast message containing said global internet address of said destination host and update a multicast group in order to establish a branch of a multicast tree; and

c. message forwarding means, coupled with an input to an output of said multicast group updating means and adapted to forward a multicast message containing said global internet address of said destination host towards an adjacent router or edge router on a shortest path

between said destination host and said edge router, wherein said at least one edge router sets up said multicast group.

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DI a. message reception means, adapted to receive a multicast message containing said global internet address; and

b. multicast group updating means, coupled with an input to an output of said message reception means and adapted to interpret said multicast message containing said global internet address of said destination host and update a multicast group based on said global internet address in order to establish a branch of a multicast tree, wherein said at least one edge router sets up said multicast group.